

# **SERVICE MANUAL**

# V-3000

**Stereo Cassette Deck** 

Remote Control Unit RC-393

- \* Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation. "DOLBY" and the double-D symbol DO are trademarks of Dolby Laboratories Licensing Corporation.
- トルピーノイズリダクションはトルピーラボラトリー スライセンシングコーポレーションからの実施権に基 づき製造されています。
- トルビー, DOLBY及びダブルD記号 DD はトルビーラ ボラトリースライセンシングコーポレーションの登録 商標です。

# 1 SPECIFICATION

仕 様

Track System 4-Track, 2-Channel Stereo
Heads 3: 1 Erase, 1 Record and 1
Playback (Combination)

Type of Tape Cassette tape C-60 and C-90
(Philips type)

Tape Speed 4.8 cm/sec. (1-7/8 ips)

Motors 2: 1 DC Servo motor
(for capstan drive)
1 DC motor
(for reel drive)

Wow and Flutter 0.045 % (W. RMS)

Frequency Response (Overall) -20 dB 15 - 21,000 Hz ±3 dB Metal Tape 15 - 20,000 Hz ±3 dB CrO<sub>2</sub> Tape 15 - 18,000 Hz ±3 dB Normal Tape

Signal-to-Noise Ratio (Overall)
60 dB (NR OFF 3% THD Level,
Weighted)
70 dB (Dolby B In, over 5 kHz),
80 dB (Dolby C In, over 1 kHz),
Fast Winding Time Approximately 85

seconds for C-60
Inputs Line: 60 mV, 50k ohms

Outputs Line: 0.44 V for load impedance of 50k ohms or more Headphones: 2 mW/8 ohms load

Power Requirements 120/220/240 V AC, 50/60 Hz (General export

models)

120 V AC, 60 Hz (U.S.A./Canada) 220 V AC, 50 Hz (Europe) 240 V AC, 50 Hz (U.K./Australia)

Power Consumption 18 W Dimensions (W x H x D) 435 x 149 x 355 mm

(17-1/8" x 5-7/8" x 14")

Weight 6.9 kg (15.3 lbs.)

Standard Accessories

Wireless Remote Control Unit RC-393, Batteries (SUM-3, "AA", "R6" type) x 2, Input-output connection cords x 2

- Specifications were determined using metal tape except as noted.
- Improvements may result in specifications or features changing without notice.

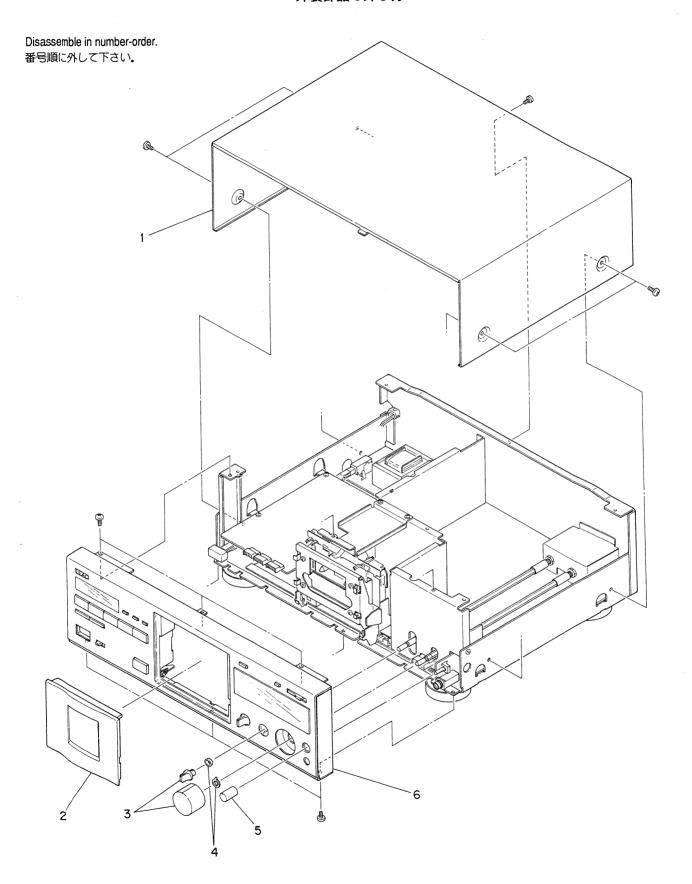
トラック形式     4トラック2チャンネル・ステレオホニック方式       ヘッド構成     消去ヘッド×1,録音×1・再生×1 コンピネーション・ヘッド       使用テープ     C-60, C-90タイプ カセット・テープ		
	1	
<b>使用テープ</b> C-60. C-90タイプ カセット・テープ		
2 78 7		
テープ速度 4.8センチ		
$\mathbf{t}$ $\mathbf{e}$		
ワウ・フラッター 0.045%(W.RMS), 0.08%(W.Peak EIAJ)		
周波数特性 (総合)     15Hz~21,000Hz±3dB: メタル 15Hz~20,000Hz±3dB: クローム 15Hz~18,000Hz±3dB: ノーマル		
80dB(NR OFF, EIAJ) お合 S N 比 70dB(ドルビーB NR IN 5kHz以上) 80dB(ドルビーC NR IN 1kHz以上)		
<b>早 巻 時 間</b> 約85秒(C-60テープ)		
<b>入</b> カ ラ イ ン:60mV(入力インピーダンス50kΩ以上)		
カ ラ イ ン:0.44V(負荷インピーダンス50kΩ以上) ヘッドホン:2mW/8Ω		
電 源 100V AC, 50/60Hz		
消 費 電 カ 18W		
外 形 寸 法 435(W)×149(H)×355(D)mm		
重 量 6.9kg		
付 <b>属 品</b> 入出力コード×2本, リモコンユニット(RC-393)×1本, 乾電池(単3)×2		

※この仕事は特に表示した項目を除き、当社基準テープを使用して測定したものです。

※仕様及び外観は、改善のため予告なく変更することがあります。

# **2 REMOVAL OF EXTERNAL COMPONENTS**

外装部品の外し方



# **3 PARTS LOCATION**

部品配置図

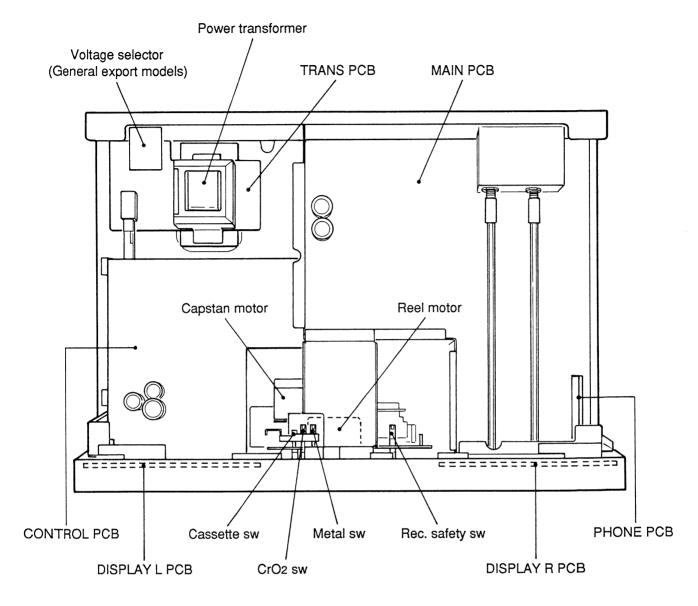


Fig. 3 Top view 上面図

# **4 MECHANICAL ADJUSTMENT AND CHECKS**

# 機構部の調整と確認

### 4-1 TAPE SPEED

- 1. Connect a frequency counter to the deck as shown in Fig. 4-1.
- 2. Simply press POWER switch to ON to rotate the motor, then continue the motor retain for approx. 1minute for warm-up.
- 3. AS soon as the warm-up finishes, load a TEAC MTT -111 test tape with a 3,000Hz test tone and play the beginning of the test tape.
- 4. Adjust the variable resistor (Fig. 4-2) to get the adjustment value of 3,000Hz to 3,010Hz
- 5. In play mode, check that the following figures are obtained at the beginning and at the end of the tape. Speed deviation:  $3,000 Hz \pm 75 Hz$

Speed drifting: with • in 75Hz

# 4-1 テープ・スピード

- 1. 図4-1のように周波数カウンターを接続する。
- 2. 電源を入れ、約1分間ウォーミングアップする。
- 3. テストテープ MTT-111 (3kHz) を巻始めの条件で再生する。
- 4. 周波数値が3,000~3,010Hzとなるよう、Fig. 4-2に示す調整 VRを調整する。
- 5. 巻始めから巻終りまで再生し、速度偏差および変動幅を確認する。

速度偏差: 3,000Hz ± 75Hz

変動幅: 75Hz以内

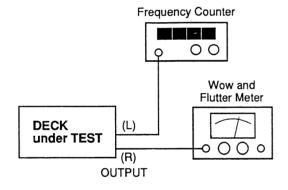


Fig. 4-1

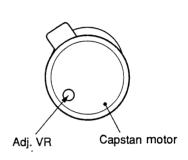


Fig. 4-2

# 4 - 2 WOW AND FLUTTER (PLAYBACK METHOD)

Note: These measurements should made at the beginning, middle, and the end of the tape.

- 1. Connect a wow and flutter meter to the deck as shown in Fig. 4-1.
- 2. Load and play a TEAC MTT 111 test tape.
- 3. Check that the readings on the wow and flutter meter are as follows.

Specifications:

0.12 % WRMS

# 4-2 ワウ・フラッター (再生法)

注: テープの巻初め、中間、巻終りで測定する。

- 1. 図4-1のようにワウ・フラッターメーターを接続する。
- 2. テストテープ MTT 111 を再生する。
- 3. ワウ・フラッター値が下の規格内に入ることを確認する。

規格: 0.12 % WRMS

# 4-3 REEL TORQUE

1. Load the cassette torque on the deck and read the pointer indication on the dial scale for each tape transport operation. The measured torque should be within the following specified values.

Specifications:

Take - up:  $30 \sim 70g \cdot cm$ 

 $(0.417 \sim 0.972 \text{ oz-inch})$ 

Supply:

2.5~6g · cm

 $(0.035 \sim 0.083 \text{ oz-inch})$ 

F. F. /REW: 80~180g • cm

 $(1.111 \sim 2.500 \text{ oz-inch})$ 

### 4-4 VOLTAGE CONVERSION

(General Export Models only)

- 1. ALWAYS DISCONNECT THE POWER LINE CORD BEFORE MAKING THESE ADJUSTMENTS!
- 2. Locate the voltage selector on the rear panel.
- 3. Using a require screwdriver, turn the selector until the numerals corresponding to the voltage requirements of your area appear.

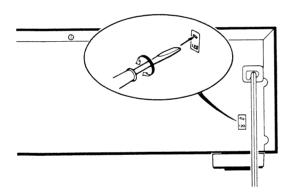


Fig.4-3

### 4-3 リールトルク

1. カセット型トルクメーターによる測定値が下表の範囲内であることを確認する。

テイクアップトルク: 30~70g・cmバックテンショントルク: 2.5~6g・cm早送り/巻戻しトルク: 80~180g・cm

# **5 ELECTRICAL CHECKS AND ADJUSTMENTS**

# アンプ部の調整と確認

### 5-1 PRECAUTIONS

- 1. Before performing adjustments and checks clean and demagnetize the entire tape path.
- 2. Make sure the deck is properly set for the voltage in your locality.
- 3. In general, adjustments and checks are made in the order of L ch then R ch. Double REF. Nos. indicate L ch/R ch . (Example ; R51/R61)
- 4. 0 dB is referenced to 0.775V. If an AC voltmeter that references 0dB to 1V is used, appropriate compensation should be made.
- 5. The AC voltmeter used in the procedures must have an input impedance of 1M ohms or more.
- 6. Note the "Deck setting" at the top of each chart. The settings apply to all check for a specific chart unless explicitly stated otherwise.
- 7. Since this deck has an automatic tape selector, be sure to use test tapes that have tape position detecting holes.
- 8. Input terminals and measuring points at each step are the same as previous step, otherwise specified.

### 5-1 注意

- 1. アンプ部の調整・確認の前に、テープ走行系の消磁と清掃を行ってください。
- 2. 特に指定のない限り、調整はL ch, R ch の順序で行ってください。
  - なお、R51/R61 のように記されている回路番号は L ch/R ch を示します。
- $3. \ 0 \ dB = 0.775V$
- 4. 測定に使用するレベル計の入力インピーダンスは  $1M\Omega$ 以上のものを使用してください。
- 5. 本機はテープセレクタ自動検出機構になっていますので、テストテープは必ずテープポジション検出孔のあるものを使用してください。
- 6. 入力端子および測定個所は各ステップにおいて特に明示されている場合を除き、直前のステップと同じです。

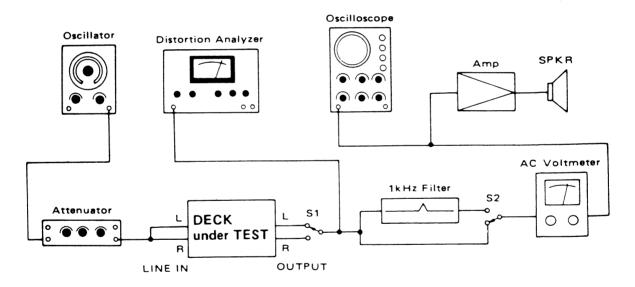


Fig. 5-1 Basic test setup 基本測定接続図

# 5 - 2 ADJUSTMENT LOCATIONS

調整個所

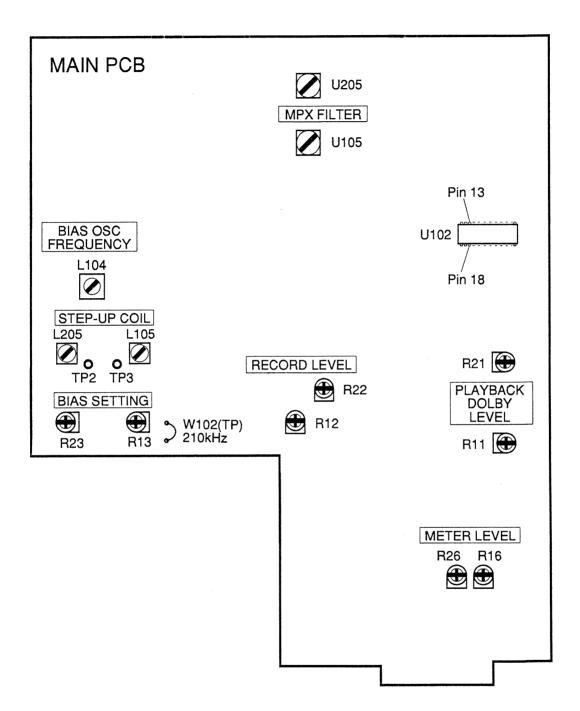


Fig.5-2 Adjustment points 調整個所

# 5-3 PLAYBACK PERFORMANCE

AUTO MONITOR SW : TAPE

再生

Deck settings Mode

: PLAY

TEAC test tapes

MTT-150: for Dolby level calibration

MTT-25702: for playback frequency response check for NORMAL

MTT-35702 : for playback frequency response check for METAL and CrO<sub>2</sub> : OUT : OUT DOLBY NR SW MTT-5511 : For S/N check for NORMAL MPX FILTER SW

MTT - 15000:For S/N check for DOLBY NR B,C

ITEM 調整項目	SETTING 設定	INPUT SIGNAL 入力信号	ADJUST (or CHECK) 調整個所	MEASURING POINT. RESULT 測定個所 • 調整値	REMARKS 備考
1. REC • PLAY head azimuth 録 • 再ヘッド アジマス	Connection : Fig. 5 – 3	MTT-25702 or MTT-35702 (10kHz)	Azimuth screws of R・P head 録・再ヘッドのアジ マス調整ネジ Fig. 5 - 4	OUTPUT(L/R): Maximum output at L & R - ch's. L-R各ch共 最大出力	
2. Playback DOLBY Level setting 再生ドルビー レベルセット	Connection: Fig. 5 – 8	MTT-150	MAIN PCB R11/R21	U102 ; pin13∕pin18 : -6dB (388mV)	
3. Playback output level 再生出力レ ベル	Connection: Fig. $5-1$	MTT-150	Check	OUTPUT (L/R): - 2dB ± 1dB (548mV~690mV) Phase: with 45° 位相:45°以内	Fig. 5 – 5
4. Meter level setting メーター・レベル	Same as above 同上	MTT-150	MAIN PCB R16/R26	PEAK LEVEL meter (L/R) - 1dB lit ( DD mark) - 1dB点 ( DD マーク)	
5. Playback Frequency response 再生周波数 特性	Same as above 同上	MTT-25702 MTT-35702	Check	OUTPUT (L/R) : Standerd 規格	Fig. 5 – 6
	Same as above 同上	MTT-5511 MTT-5571 Playback the leader tape portion. リーダーテープ部を 再生	Check	OUTPUT (L/R) : S/N 45dB min. (120u) 46dB min. (70u)	
6. Playback S/N ratio 再生S/N比	Same as above 同上 DOLBY NR: OFF→B→C	MTT-15000	Check	OUTPUT (L/R) Amount of variation in respect to the S/N value MT - 15000 signal is played DOLBY NR OFF. MTT - 15000をDOLBY N した時のS/N値に対するS/DOLBY NR B: 8.5dB DOLBY NR C: 17dB C - 2dB (615 mV) is referen 基準レベルは - 2dB (615 mV)	when the back with IR OFF 再生N変化量 or more or more level

# 5-4 MONITOR PERFORMANCE

モニター系

Deck settings

Mode REC LEVEL control BALANCE control

: RECORD/PAUSE

: Maximum : 0(center)position AUTO MONITOR sw.

DOLBY NR sw. MPX FILTER sw. : SOURCE

OUT OUT

ITEM 調整項目	SETTING 設定	INPUT SIGNAL 入力信号	ADJUST (or CHECK) 調整個所	MEASURING POINT. RESULT 測定個所 • 調整値	REMARKS 備考
7. Min. Line input level ライン最小 入力レベル	Connection: Fig. 5-1	LINE IN (L/R): 400Hz/-19dB (86.9mmV)	Check	OUTPUT (L/R) : -2dB ± 3dB (436mV~869mV)	
8. Specified		LINE IN (L/R): 400HZ/-9dB (275mV)	REC LEVEL (& BALANCE) control.	OUTPUT (L/R) : -2dB (615mV)	
level Line 規定入 カレベル	Line 規定入		* Adjust the balance between the left and right channels by BALANCE contr L-R chのレベル差は、BALANCEつまみにて修正。 * After adjusting do not move the RECLEVEL & BALANCE control. (Speci position) 調整後はREC LEVEL & BALANCEつまみを動かさないこと。		
9. Meter level メータレベ ル	Connection : Fig. 5-1	LINE IN (L/R): 400HZ/-9dB (275mV)	Check	PEAK LEVEL meter (L∕R): -1dB lit; (□□□) mark	
	Connection : Fig. 5-1 MPX FILTER swon	LINE IN (L/R): 19kHZ/-9dB (275mV)	U105/U205	OUTPUT (L/R) : min.	
11.PHONES output level PHONES 出力レベル	Connection : Fig. 5-7 PHONES LEVEL control : max.	LINE IN (L/R): 400HZ/-9dB (275mV)	Check	PHONES: At each channel 各チャンネルで - 16dB ± 3dB (86.9mV~173mV)	8Ω load

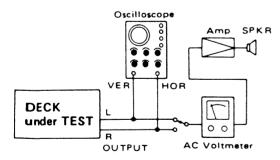


Fig .5-3 Test setup for azimuth check 位相測定接続図

0° (in phase) (同位相)

45°

90°

135° 180° (out of phase)

(逆位相)









Fig. 5-5 Confirming phase relationship 位相

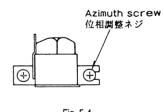


Fig. 5-4

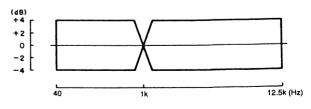


Fig. 5-6 Playback frequency response 再生周波数特性

# 5-5 RECORDING PERFORMANCE

## 録音系

**Deck Settings** 

Mode

: REC/PLAY

REC LEVEL control BALANCE control

: Specified position 規定位置 : Specified position 規定位置

BIAS FINE control

: "0 "position

DOLBY NR sw. MPX FILTER sw. : OUT

AUTO MONITOR sw.

: TAPE

ITEM 調整項目	SETTING 設定	INPUT SIGNAL 入力信号	ADJUST (or CHECK) 調整個所	MEASURING POINT. RESULT 測定個所 • 調整値	REMARKS 備考
12. Bias osc. frequency バイアス 発振周波数	Connection: Fig. 5-8 Tape: MTT-5571 Mode: REC/PLAY	No signal	L104	W102 : 210kHz ± 5kHz	
13. Step up coil ステップア	Same as above 同上	No signal	L105/L205	TP 2/TP 3: Minimum -DC voltage -DC 電圧最小値	
ップコイル	141_1_			ximum negative voltage ス電圧の最大値にセットする。	
14. Record bias バイアスセット	Connection: Fig. 5-1 Tape: MTT-5511 BIAS FINE control: 0 position	LINE IN (L/R): 400Hz & 10kHz alternately/ 交互信号/ - 42dB (6.15mV)	R13/R23	OUTPUT (L/R): Equal output level (record playback) between 400Hz a 400Hzと10kHzの録再出力が等し	nd 10kHz.
	Connection : Fig. 5-1 Tape : MTT-5511	LINE IN (L/R):	R12/R22	OUTPUT (L/R) : Output level (record and 録再出力 — 5dB (436	playback) mV)
15. Record level 録音レベル	Connection: Fig. 5-1 Tape: MTT-5571, MTT-5561 DOLBY NR sw.: IN/OUT, B/C	400HZ/-12dB (195mV)	Check	OUTPUT (L/R): Output level (record and 録再出力 -5±2dB (NR -5±3dB (NR	OUT)
16.Total harmonic distortion 総合歪率	Connection: Fig. 5-1 Tape: MTT-5571 Tape: MTT-5561 Tape: MTT-5511	LINE IN (L/R): 400HZ/-12dB (195mV)	Check	OUTPUT (L/R): 2.0 % or less (以下) (NOR 2.5 % or less (以下) (MET	MAL) `AL,CrO2)
17.Overall frequency response 録音周波 数特性	Connection : Fig. 5-1 Tape : MTT-5571 Tape : MTT-5561 Tape : MTT-5511	LINE IN (L/R): 63Hz~12.5kHz/ -42dB (6.15mV)	Check	OUTPUT (L/R) Standard Fig. 5-9	

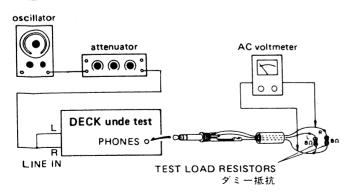
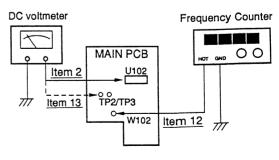


Fig. 5-7 Test setup for PHONES check ホーン出力測定接続図



TEAC recording test tapes

MTT-5571 : For METAL

MTT-5561 : For CrO2 MTT-5511 : For NORMAL

Fig. 5-8 Test setup 調整用接続図

ITEM 調整項目	SETTING 設定	INPUT SIGNAL 入力信号	ADJUST (or CHECK) 調整個所	MEASURING POINT. RESULT 測定個所 • 調整値	REMARKS 備考	
18. Overrall S/N ratio 総合S/N比	Connection : Fig. 5-1 Tape : MTT-5571 Tape : MTT-5561 Tape : MTT-5511	No signal 無信号	Check	OUTPUT (L/R): METALL, CrO2 45dB min. NORMAL 44dB min. 400Hz/-2dB (615mV) is the referen level。基準レベルは400Hz/-2dB (615m		
19. Erase efficiency	Connection : Fig. 5-1 (but engage 1kHz filter) (1kHz フィルター使用) Tape:MTT-5571	(0.869V)	Check	OUTPUT (L/R) : 65dB min. ratio (以上)		
消去効果	between the 1 kHz porti	on and the erased	portion.	Rewind and play to find the 時の再生レベルとの差を測定。	difference	
20. REC MUTE	Same as above 同上	Same as above 同上	Check	OUTPUT (L/R) : 65dB min. ratio		
function REC MUTE 効 果	Record a 1 kHz signal. Push REC MUTE button midway. Rewind and play to fine the difference between the 1 kHz portion and the "rec mute" portion.  1 kHz 信号を録音し、途中でREC MUTEボタンを押して無信号録音部分を作る。このテープを再生し、1 kHz部分と無信号部分との出力レベル差を測定。					
21. Channel separation	Same as above 同上	LINE IN: L ch 1kHz/ - 9dB (275mV) R ch No signal 無信号	Check	OUTPUT (R) : 30dB min. ratio		
チャンネル セパレーション	Set the deck to record mode rewind and play to find the difference between the 1 kHz recorded portion (L ch) and "no signal" portion (R ch). 録音後、再生して1kHz録音部分(L ch) と無信号録音部分(R ch) との出力レベル差を測定。					
	Change the above connec L chとR chを入れ替えて			0.		
22. Adjucent track crosstalk トラック間	Connection : Fig. 5-1 but not connect LINE (L) and output (L) L chの入出力の接続不要	- 9dB (275mV)		OUTPUT (R) : 40dB min. ratio		
2021 P	Record a 125Hz signal on R ch track and note output level. Invert tape and play R ch track. Check leakage level against the output reference of previously recorded portion. R ch トラックに125Hz信号を録音し、その再生出力を基準レベルとする。 次にテープを反転し、再生した時のR ch 出力レベルとの差を測定する。					
23.BIAS FINE range BIAS FINE 可変幅	Connection: Fig. 5-1 Tape: MTT-5511 Mode: REC/PLAY	LINE IN (L/R): 10kHz/-42dB (6015mV)	Turn the BIAS FINE control BIAS FINE つま みを回す	OUTPUT (L/R): Range;5dB min. (以上)		

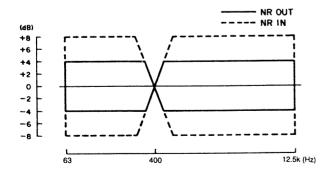
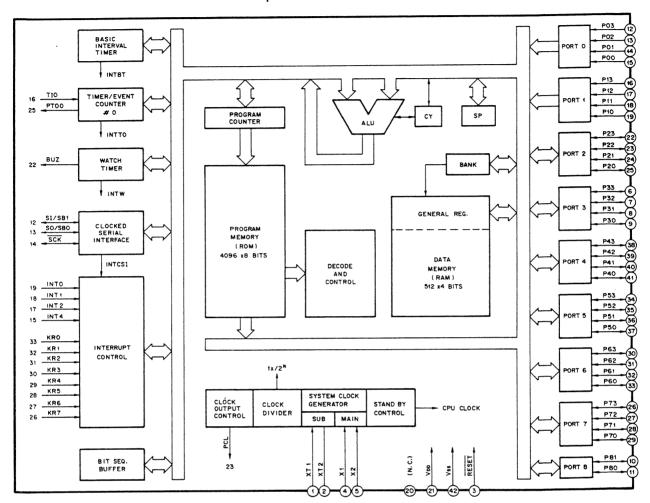


Fig. 5-9 Overall frequency response 録再周波数特性

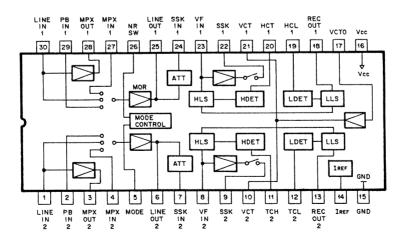
# **6 IC BLOCK DIAGRAM**

IC ブロック・ダイアグラム

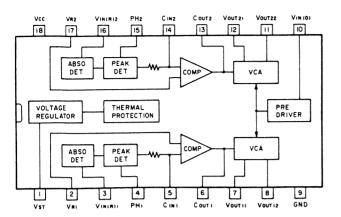
# μPD75004CW-074



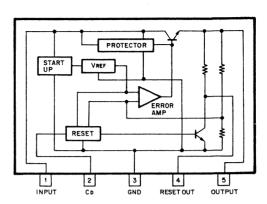
# **CXA1330S**



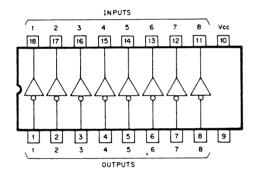
μPC1297CA



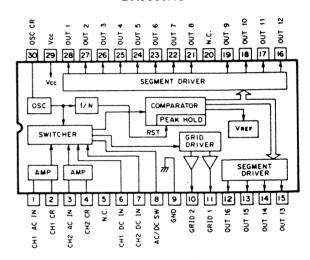
L78MR05



LB1240



**BA6800AS** 



# PARTS LISTS SECTION

### NOTES

As regards the resistors and capacitors, refer to the circuit diagrams and the PCB ass'y drawing contained in this manual.

- Parts marked with\* require longer delivery time.
- <u>h</u> parts marked with this sign are safety critical components.

   They must always be replaced with identical component-refer to the TEAC parts List and ensure exact replacement.
- PC boards shown viewed from parts side.

### 注意

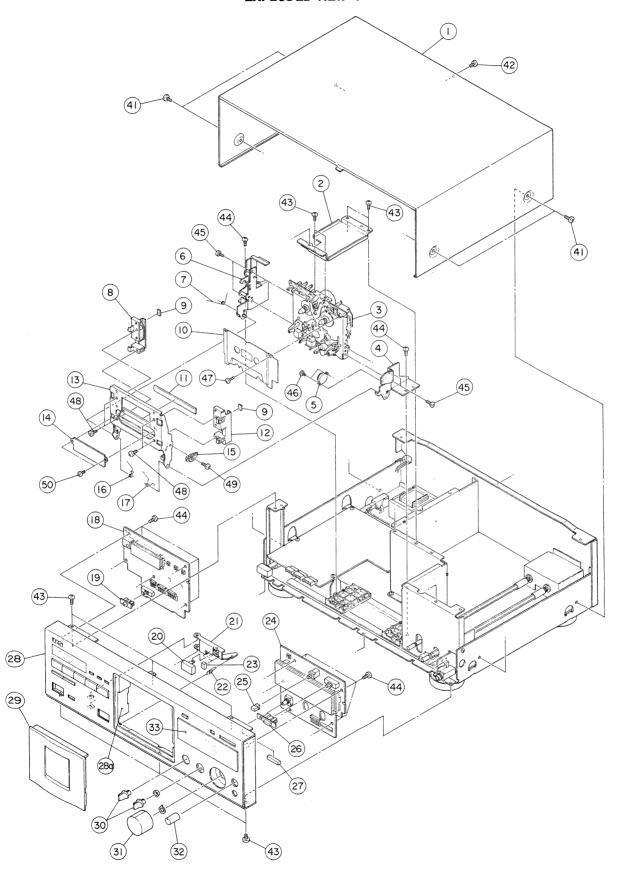
標準の抵抗、コンデンサーは省略してあります。回路図及び基板図を参照してください。

- ¥印の部品は納期が若干かかります。あらかじめご了承ください。
- △印は安全規格重要部品です。交換するときは必ずティアック指定の部品を使用してください。
- プリント基板図は部品面が示されています。

# **7 EXPLODED VIEWS AND PARTS LIST**

分解図とパーツ・リスト

# **EXPLODED VIEW -1**

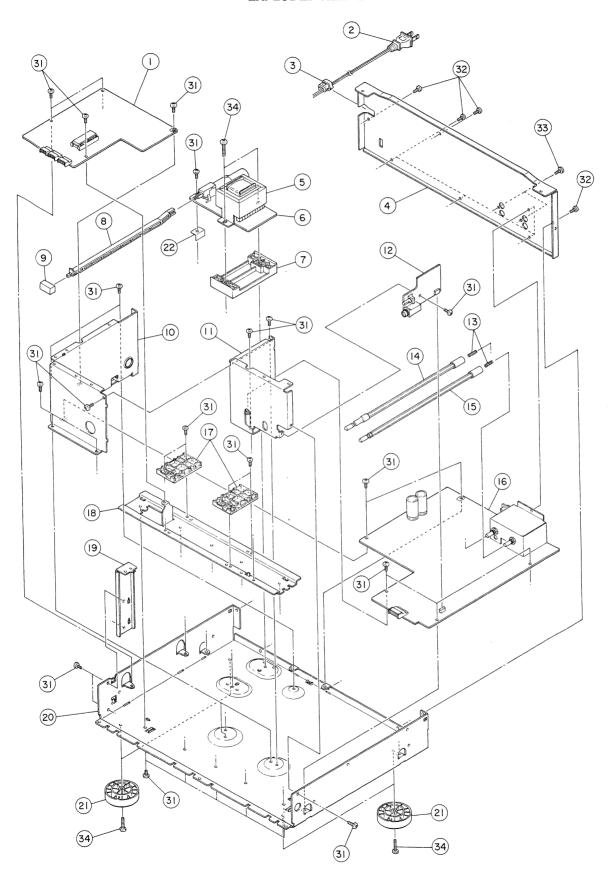


# EXPLODED VIEW-I

REF.NO.	PARTS NO.	DESCRIPTION	REMARKS
-    - 2  - 3  - 4  - 5	*5801405800 *5801409200 *5761823600 *5801415900 *5800620500	BONNET(I) PLATE, MECHA HOLD CASSETTE MECHA (3HD) CMAY5Z249 DAMPER BRACKET ASSY DAMPER ASSY	
- 6  - 7  - 8  - 9  - 0	5801416100 *5801411000 *5801413000 *5801415700 *5801412600	EJECT ASSY HOLDER IP SPRING CASSETTE GUIDE(L) CUSHION T2 PLATE	
I-II I-I2 I-I3 I-I4 I-I5 I-I6	*580 4 0400 *580 4 3 00 *580 4 6000 *580 4 0700 *580 4 5600 *580 4 5400	CUSHION T3.2 ANTI-STATIC CASSETTE GUIDE(R) HOLDER ASSY PLATE LID (I) HOLDER GEAR SPRING(L),STABILIZER	
- 7  - 8  - 9  -20	*5801415500 *5200317200 5801407700 5801409000	SPRING(R),STABILIZER DISPLAY L PCB ASSY TIMER KNOB BUTTON(E)	Ref. pages 23 & 26
1-21 1-22 1-23 1-24 1-25	*5801408900 *5801409100 *5801440000 *5200317300 5801407500	ARM,EJECT BUTTON SPRING,BUTTON ARM BUTTON CUSHION DISPLAY R PCB ASSY POSH BUTTON	Ref. pages 23 & 26
I-26 I-27 I-28 I-28a	5801407900 *5801434100 5801403000 5772922200 5801403801	NR KNOB PCB CUSHION FRONT PANEL (3) ASSY FRONT ESCUTCHEON ASSY OPERATION BUTTON	
1-29 1-30 1-31 1-32 1-33	5801416901 5801409300 5801411700 5801411200 *5801406100	LID ASSY (3) KNOB (PAN) KNOB ASSY (B) KNOB(B-B) METER COVER	
1-41 1-42 1-43 1-44 1-45	*5800612400 *5783693008 *5783033006 *5783603008 *5783003004	SCREW, M3X8 BLK SCREW BIND S TITE M3X8 (BLK NI) SCREW, BIND S-TITE M3X6 SCREW, BIND P-TITE M3X8 SCREW PAN S TITE M3X4	
1-46 1-47 1-48 1-49 1-50	*5783012004 *5783542612 *5783542608 *5783552604 *5780022603	SCREW,PAN B TITE M2X4 SCREW,BIND M2.6X12 NI BLK SCREW BIND P TITE M2.6X8 BLK NI SCREW PAN B TITE M2.6X4 (BLK NI) SCREW BIND M2.6X3 (BLK NI)	

<sup>[</sup>J]:JAPAN [US]:U.S.A. [C]:CANADA [GE]:GENERAL EXPORT [E]:EUROPE [UK]:U.K. [A]:AUSTRALIA

# **EXPLODED VIEW -2**

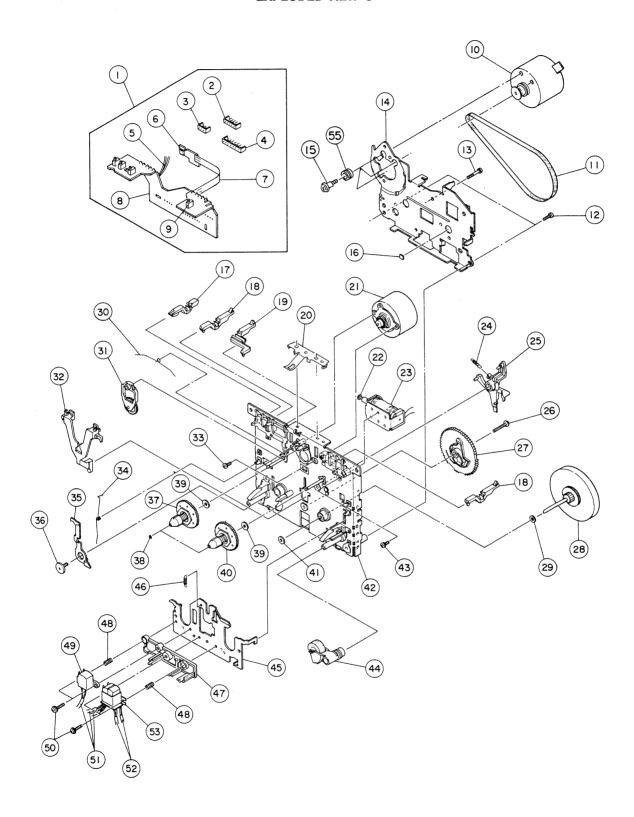


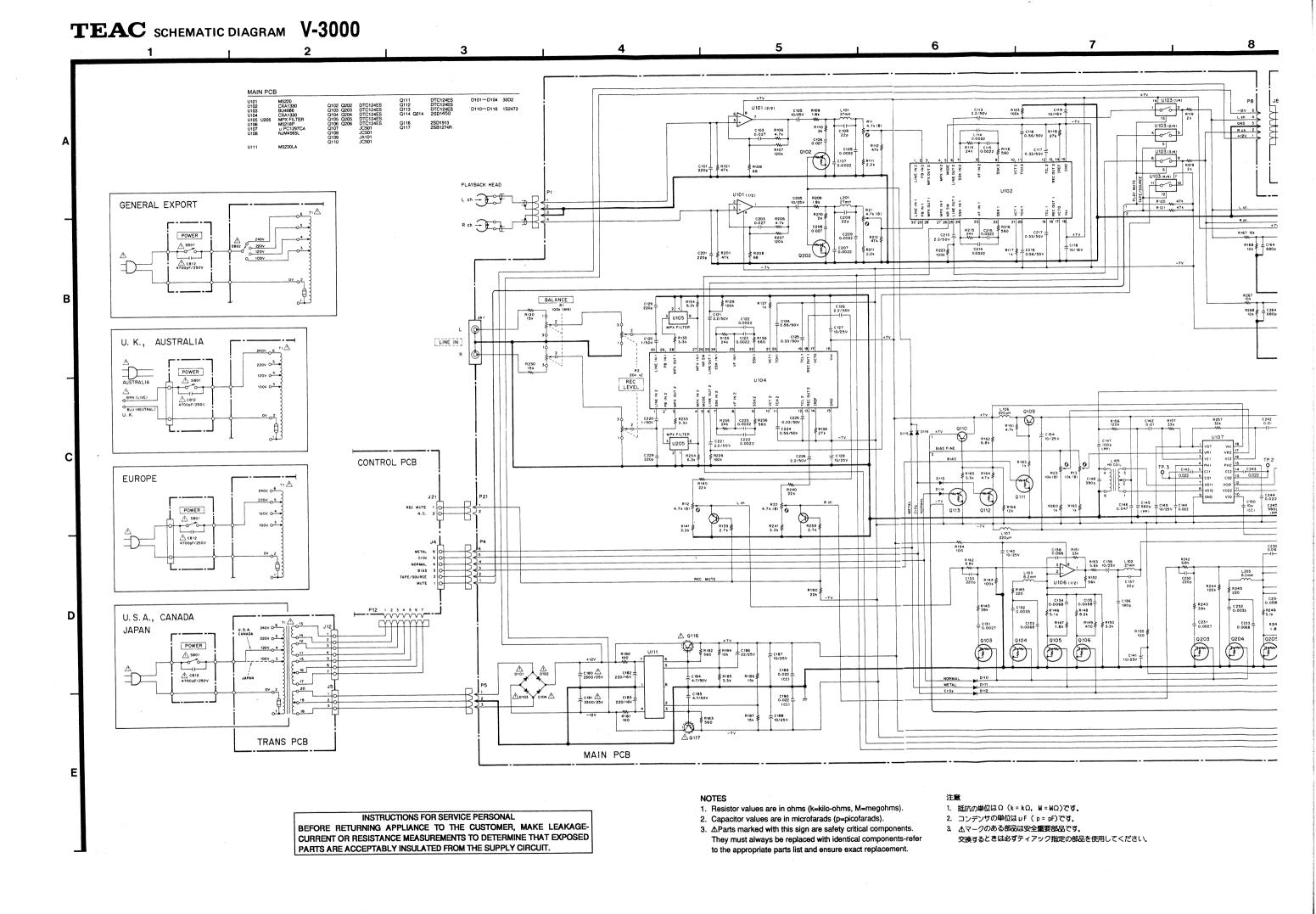
# EXPLODED VIEW-2

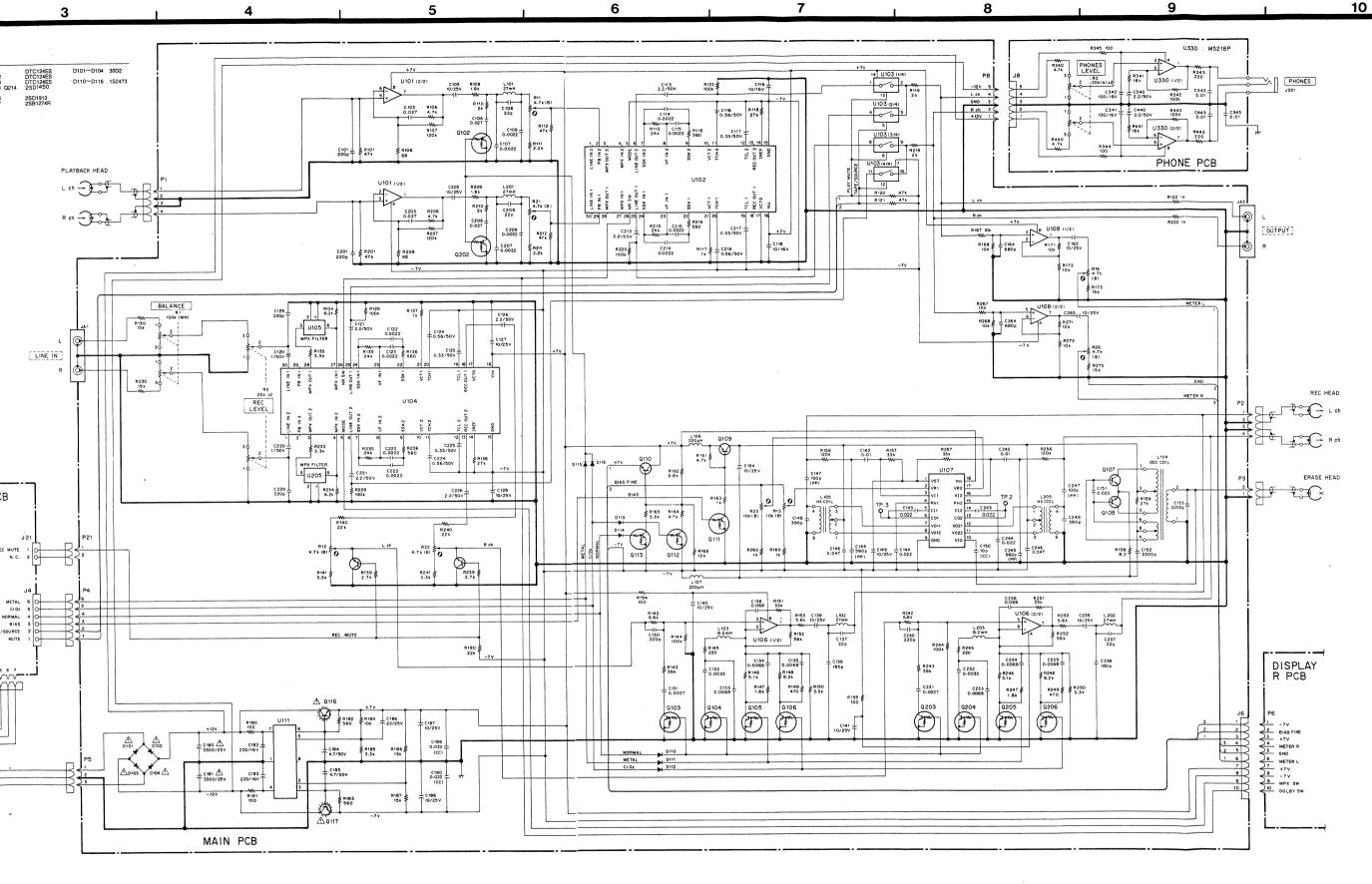
REF.NO.	PARTS NO.	DESCRIPTION	REMARKS
2- I 2- 2	*5200317100 \$\times 5350015600 \$\times 5350010700 \$\times 5350011700 \$\times 5128047000 \$\times 5350008300		Ref. pages 24 & 26
2- 3 2- 4	*5317003400 *5801405600 *5801405700		
2- 5 2- 6	↑*5320060000 *52003 7500 *52003 7510 *52003 7520 *52003 7530 *52003 7540 *52003 7550	The state of the s	Ref. pages 24 & 27 Ref. pages 24 & 27
2- 7 2- 8 2- 9	*5801406000 5801406200 5801406800	TRANS BASE ROD, JOINT(P) POWER BUTTON	
2-10 2-11 2-12 2-13 2-14	*5200316900 *5801362200 5801434000		Ref. pages 22 & 25
2-15 2-16 2-17 2-18 2-19	5801412001 *5200316800 *5801406500 *5801405100 *5801406700	MAIN PCB ASSY, MECHA BASE(B) CHASSIS ANGLE	Ref. pages 22 & 25
2-20 2-21 2-22	*5801414900 *5801435000		
2-31 2-32 2-33 2-34	*5783033006 *5783693006 *5783543008 *5783034020	SCREW,BIND S TITE M3X6 (BLK NI) SCREW,BIND PT M3X8 NI BLK	

<sup>[</sup>J]:JAPAN [US]:U.S.A. [C]:CANADA [GE]:GENERAL EXPORT [E]:EUROPE [UK]:U.K. [A]:AUSTRALIA

# **EXPLODED VIEW -3**







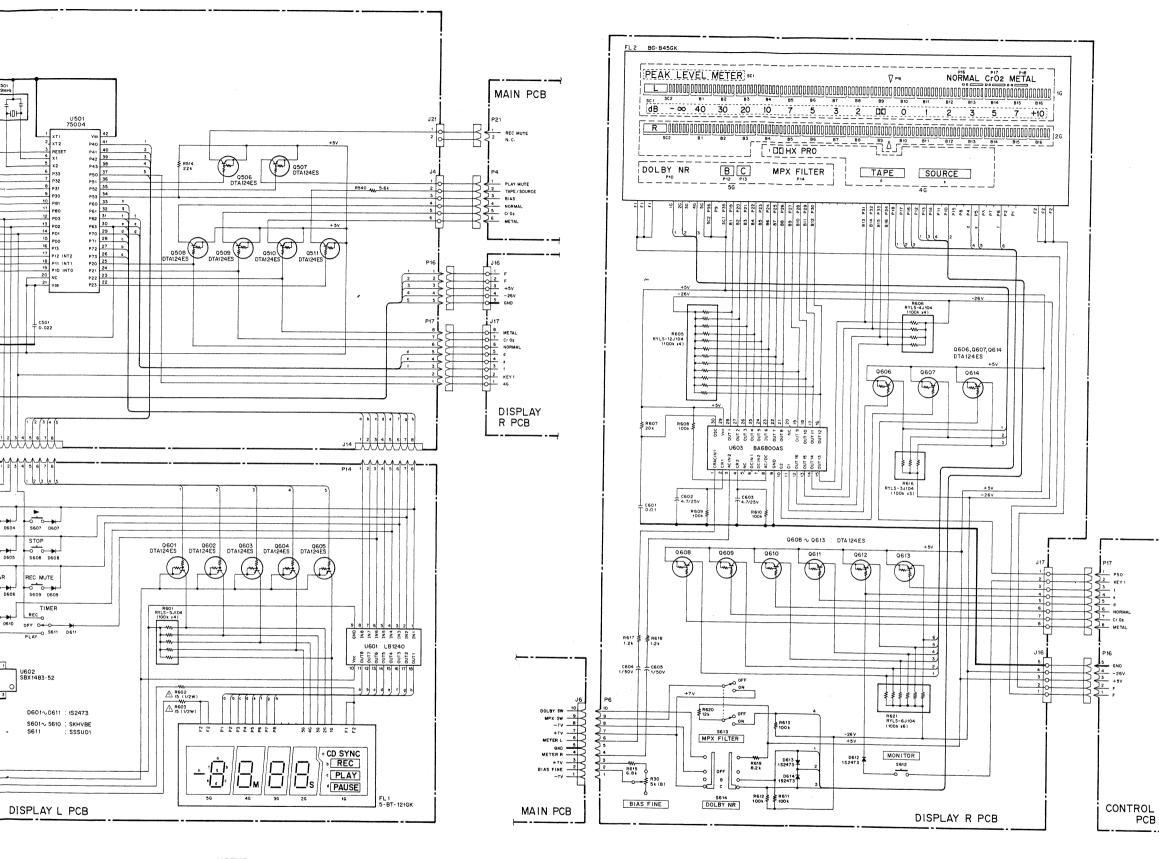
IS FOR SERVICE PERSONAL ANCE TO THE CUSTOMER, MAKE LEAKAGE-EASUREMENTS TO DETERMINE THAT EXPOSED ULATED FROM THE SUPPLY CIRCUIT.

### NOTES

- 1. Resistor values are in ohms (k=kilo-ohms, M=megohms).
- 2. Capacitor values are in microfarads (p=picofarads).
- 3.  $\triangle$ Parts marked with this sign are safety critical components. They must always be replaced with identical components-refer to the appropriate parts list and ensure exact replacement.

- 抵抗の単位はΩ (k = kΩ, M = MΩ)です。
- 2. コンデンサの単位は μ F ( p = pF)です。
- 交換するときは必ずティアック指定の部品を使用してください。





6

NOTES

MAKE LEAKAGE-

INE THAT EXPOSED

CIRCUIT.

1. Resistor values are in ohms (k=kilo-ohms, M=megohms).

2. Capacitor values are in microfarads (p=picofarads).

3. △Parts marked with this sign are safety critical components. They must always be replaced with identical components-refer to the appropriate parts list and ensure exact replacement.

抵抗の単位はΩ(k=kΩ, M=MΩ)です。

2. コンデンサの単位は p F ( p = pF)です。

交換するときは必ずティアック指定の部品を使用してください。 Stereo Cassette Deck V-3000

10

# EXPLODED VIEW-3

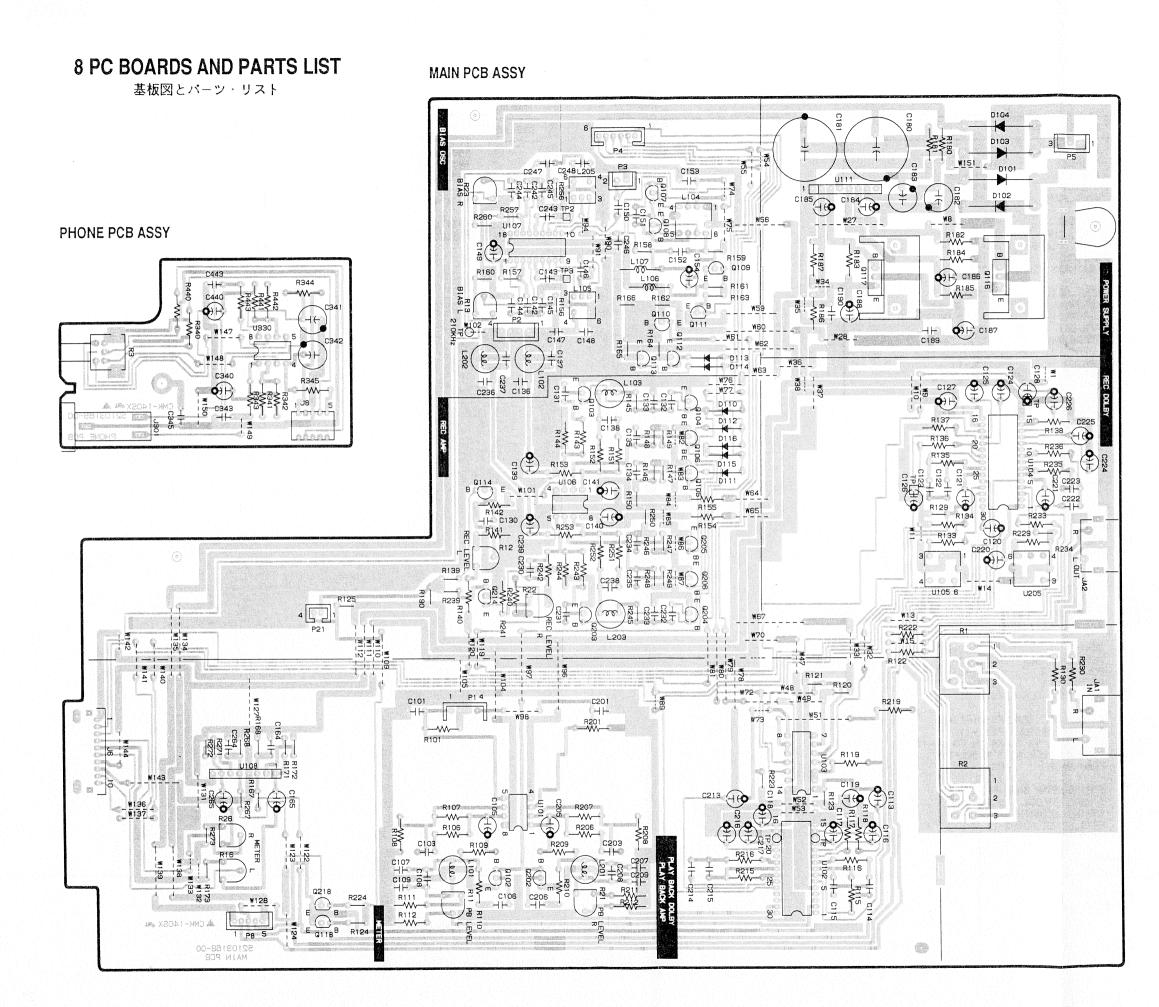
DEE NO		DESCRIPTION	REMARKS
REF.NO.	PARTS NO.	DESCRIPTION	NEWING
3- 1 3- 2 3- 3 3- 4 3- 5	*5761837700 *5761749100 *5761749300 *5761769600 *5761843100	PCB BASE BLK F567-110 B5B-EH UY15B-14 B3B-EH UY15B-12 B7B-EH UY15B-16 W1RE, JUMP WGBK-10	
3- 6 3- 7 3- 8 3- 9 3-10	*5761843000 *5761837900 *5761842900 *5761748700 5761837600	GP2SO4B AZI3A-00 WIRE,JUMP WG46V-06D RELAY PLATE FP17E-11A SW.,PUSH UE16E-11 MTR MAIN BLK F525-S279	
3-11 3-12 3-13 3-14 3-15	5761769200 *5761690900 *5761769300 *5761768900 *5761838200	BELT,MAIN FRI5R-II SCREW,WAVE 2.6X8 UGI2H-I4 SCREW,BIND S M2.6X23.5 UGI7H-II F/W BKT FC47D-I3 SCREW,MOTOR BRACKET UGI2W-I2	
3-16 3-17 3-18 3-19 3-20	*5761747700 5761749500 5761837300 5761842800 *5761750200		
3-21 3-22 3-23 3-24 3-25	5761837500 5761746300 5761836800 *5761768800 *5761769000	MTR REEL BLK F564-258 PIN,SOLENOID PL366-11 SOLENOID BLK F765-251 PLAY ARM SPRING FK22G-14 PLAY ARM(F) FD38M-22	
3-26 3-27 3-28 3-29 3-30	*5761836300 5761837200 5761837400 *5761689200 *5761745400	SCREW, WAVE 2X15 UG17L-11 CAM GEAR(F) FD38P-18 ASSY F/W FR18M-41B POLYSLIDER FJ111-30 SPRING, HOLD FK22E-11	
3-31 3-32 3-33 3-34 3-35	5761837100 *5761836600 *5761745900 *5761768600 *5761768500	SCREW,PAN SW 2.6X6ZN FGII4-20 EJECT SAFETY SPRING(L) FK22P-16	
3-36 3-37 3-38 3-39 3-40	*5761837000 5761836700 *5761745600 *5761745500 5761792500	POLYSLIDER FJIII-17	
3-41 3-42 3-43 3-44 3-45	*5761836500 *5761836900 *5761769800 5761836400 *5761836100	WASHER OIL SEAL FJ141-11A CHASSIS BASEBLK F612-110 SCREW PAN SW 2.6X4 ZN FG114-15 PINCH ROLLER ASSY FR20L-21A HEAD BASE FC38N-D4	
3-46 3-47 3-48 3-49 3-50	*5761836200 *5761836000 *5761767500 5761767900 *5761767400	SPRING, HEAD BASE FK22L-11A 3 HEAD SPACER FD44N-12 SPRING, AZIMUTH FK21U-11 HEAD, ERASE FU192-11 V-670 F LOCK SCREW FG137-18	
3-51 3-52 3-53 3-54 3-55	*5761835900 *5761770300 5761770200 *5761838100 *5761838000	WIRE CONNECT. WH58M-03 WIRE CONNECT. WH51L-05 HEAD,R/P H-2371 WIRE CONNECT. WH58N-03 CUSHION,MOTOR FJI15-12	

# INCLUDED ACCESORIES

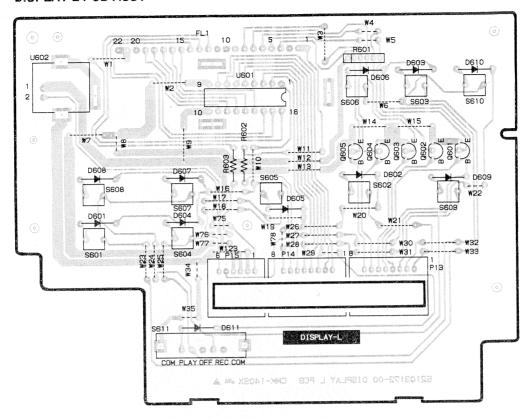
REF.NO.	PARTS NO.	DESCRIPTION	REMARKS
	*5700126300 *5700126400	OWNER'S MANUAL [J ] OWNER'S MANUAL (E) OWNER'S MANUAL (M) REMOTE CONTROL UNIT RC-393 BATTERY, J	
		BATTERY, EXCEPT/J PINPLUG CORD	

[J]:JAPAN [US]:U.S.A. [C]:CANADA [GE]:GENERAL EXPORT [E]:EUROPE [UK]:U.K. [A]:AUSTRALIA

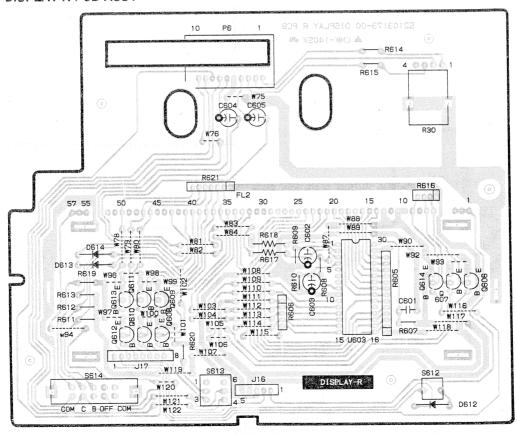
Parts marked with \*require longer delivery time.



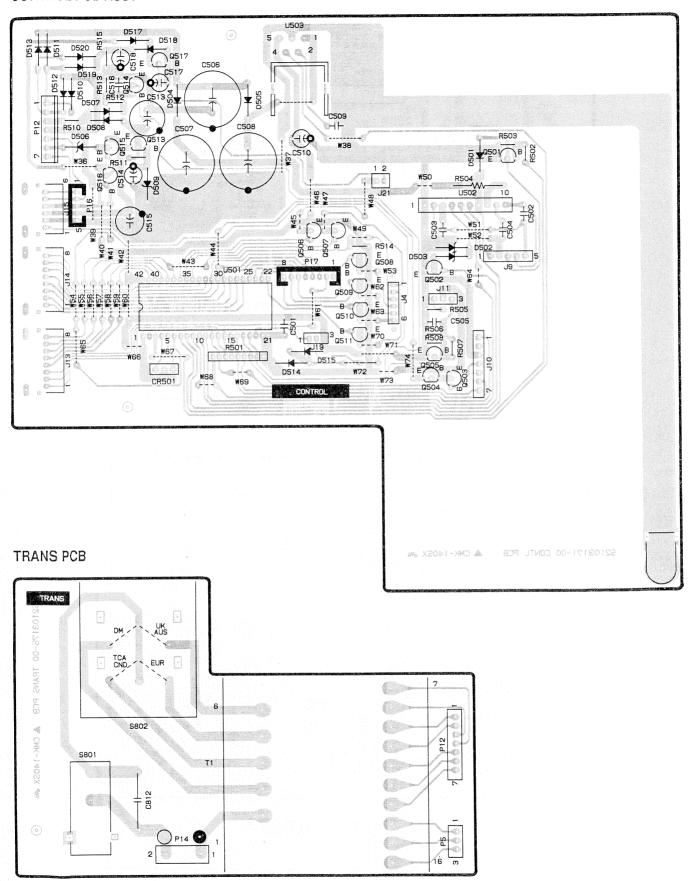
# **DISPLAY L PCB ASSY**



### DISPLAY R PCB ASSY



# CONTROL PCB ASSY



# MAIN PCB ASSY

REF.NO.	PARTS NO.	DESCRIPTION
	*5200316800 *5210316800 5730039200 5783033008 55555590000	MAIN PCB ASSY MAIN PCB HEAT SINK OSH-2425-SPL SCREW,BIND S TITE M3X8 EARTH PLATE(A)
C101 C201 C108 C208 C129 C229 C130 C230	5801406300 5263106220 5267012820 5263106220 5263106220	BRACKET, VR C.,POLY. 220PF 100V J VT C.,CERAMIC 22PF 50V J VFT C.,POLY. 220PF 100V J VT C.,POLY. 220PF 100V J VT
C136 C236 C145 C245 C147 C247 C148 C248 C150	5263106020 5263107220 5263105420 5263107120 5172200000	C.,POLY. 180PF 100V J VT C.,POLY. 560PF/100V J VT C.,POLY. 100PF/100V J VT C.,POLY. 510PF 100V J VT C.,CERAMIC 10PF/50V T
C153 C164 C264 C180 C181 Z	5263101720 5263101320 5172222000 № 5260476910 5173434000	C.,P. 0.0033MF/100V J VT C.,POLY0022UF 100V J VT C.,CERAMIC 680PF/50V T C.,ELEC 3300UF 25V M PZ VF C.,CERAMIC 0.022MF 50V
D110-D116 J6 JA1 .JA2	\$5224018200 5224012920 5334073700 5330511800 5286041420	DIODE 30D2FC DIODE IS2473 SOCKET,CONNECT.IOP TKC-B PIN JACK 2P YKC2I-02IO CHOKE COIL 27.0MH VT
L103 L203 L104 L105 L205	5286041420 5286040820 5286042000 5286041800 5286031000	CHOKE COIL 27.0MH VT CHOKE COIL 8.2MH VT OSC COIL STEP UP COIL COIL,CHOKE 220UH LAL04KB
PI ,P2 P3 P4 P5 P8	5336245400 5336245200 5336249600 5336303300 5336279500	PLUG,CONNECT.B04B-XH-A PLUG,CONNECT.B02B-XH-A PLUG,CONNECT.B06B-PH-K-S WHT PLUG,CONNECT.B3B-EH WHT PLUG,CONNECT.IL-SDD-5P-S2T
P21 Q102 Q202 Q103 Q203 Q104 Q204 Q105 Q205	5232255720 5232255720	PLUG, CONNECT. WHT TRANSISTOR DIGI. DTC124ES TRANSISTOR DIGI. DTC124ES TRANSISTOR DIGI. DTC124ES TRANSISTOR DIGI. DTC124ES
Q106 Q206 Q107,Q108 Q108 Q109 Q110	5232255720 5230782320 5230782320 <b>5230019020</b> <b>5230782320</b>	TRANSISTOR DIGI. DTC124ES TRANSISTOR JC 501 Q TRANSISTOR JC 501 Q TRANSISTOR 2SA933SLV TRANSISTOR JC 501 Q
Q116 .	5232255720 5231762020 ↑ 5231762800 ↑ 5230509700 5282417800	TRANSISTOR DIGI. DTC124ES TRANSISTOR 2SD1450S/T 0.3 TRANSISTOR 2SD1913R TRANSISTOR 2SB1274R IS2UVR 16 100KMN
R2 R11 R21 R12 R22 R13 R23 R16 R26	5282417600 5280021100 5280021100 5280021300 5280021100	IS2UVR 16 20K X2 R.,TRIMMER 4.7KB R.,TRIMMER 4.7KB R.,TRIMMER 10KB H. R.,TRIMMER 4.7KB

# MAIN PCB ASSY

REF.NO.	PARTS NO.	DESCRIPTION
U101	5220426900	IC.,M5220P
U102	5220444700	IC.,CXA1330S
U103	5220041100	IC.,BU4066B
U104	5220444700	IC.,CXA1330S
U105 U205	5292810000	L.P.FILTER MPX
U106	5220418800	IC.,M5218P
U107	5220430400	IC.,UPC1297CA
U108	5220440600	IC.,NJM4565L
U111	5220425800	IC.,M5230LA

# PHONE PCB ASSY

REF.NO.	PARTS NO.	DESCRIPTION
C343 C443 C345 J301	*5200316900 *5210316900 5173433000 5173433000 5330016600	PHONE PCB ASSY PHONE PCB C.,CERAMIC 0.01UF 50V T C.,CERAMIC 0.01UF 50V T JACK,3P FJ333DAB-Z
J8 R3 U330	5336281500 5282417900 5220418800	SOCKET, CONNECT. IL-SDD- 5S-S2L2 IS2UVR 9 20KAX2 IC., M5218P

# DISPLAY L PCB ASSY

REF.NO.	PARTS NO.	DESCRIPTION
	*5200317200 *5210317200 5801408200 5224012920 5347017900	
P15 Q601-Q605	5334074000 5334073800 5232254820 5242125500 5181978000	PLUG, CONNECTOR 8P TKC-B PLUG, CONNECTOR 6P TKC-B TRANSISTOR DIGI. DTA124ES R., ARRAY RYLS-5J104 R., INCOMBUSTIBLE F50 150HM
\$601 <b>-</b> \$610 \$611 U601 U602	5300916400 5232253300	SW.,TACT SKHVBE SW.,SLIDE I-3 SSSU01 TRANSISTOR ARRAY LB1240 MODULE,REM.CONTROL SBX1483-52

# DISPLAY R PCB ASSY

REF.NO.	PARTS NO.	DESCRIPTION		
D612-614 FL2		DISPLAY R PCB FL HOLDER(A) DIODE,1S2473		
		TRANŚISTOR DIGI. DTA124ES ISIUVR II 5KB R.,ARRAY RYLS-12J104		
R616 R621 S612	5240550820 5242125300 5242125600 5302108600 5300055300			
S614 U603	5300916900 5220443400	SW.,SLIDE 2-3 IC.,BA6800AS		

# CONTROL PCB ASSY

REF.NO.	PARTS NO.	DESCRIPTION
C501	*5200317100 *5210317100 5555590000 5800990100 5173434000	CONTROL PCB ASSY CONTROL PCB EARTH PLATE(A) HEAT SINK C.,CERAMIC 0.022MF 50V
C506,C508	5267020420 5173433000 3 \Delta 5260466210 \Delta 5260467310 5172224000	C.,CERAMIC 0.1UF 50V Z VT C.,CERAMIC 0.01UF 50V T C.,ELEC 2200UF 25V M AU VF C.,ELEC 4700UF 25V M AU VF C.,CERAMIC 1000PF/50V T
C513 C514 C515 C516 CR501	5260464610 5260461420 5260463320 5173435000 5347017700	E.,ELEC 330UF 50V M AU VF C.,ELEC 4.7UF 50V M AU VT C.,ELEC 100UF 35V M AU VT C.,CERAMIC 0.047UF 50V Z OSC,EFO-GC4194A4
D501 D502 D503 D504,D505 D506	5224017120 5224574501 5224572201 5 \( \Delta \) 5224017120 5224573201	DIODE, ISRI39-200 T-31 DIODE, ZENER RD7.5EL3 FR DIODE, ZENER RD3.6EL2 FR DIODE, ISRI39-200 T-31 DIODE, ZENER RD5.1EL2 FR
JI3 ,JI4	5334073500 5334073500	DIODE, IS2473 DIODE, ISRI39-200 T-31 DIODE, ZENER RD33EL1 FR DIODE, ISRI39-200 T-31 CONN. SOCKET 8P TKC-B
J15 P12 P16 P17 Q501	5334073300 5336303700 5336249500 5336249800 5231761300	CONN. SOCKET 6P TKC-B PLUG,CONNECTOR B7B-EH (WHT) PLUG,CONNECT.B05B-PH-K-S WHT PLUG,CONNECT.WHT TRANSISTOR 2SD734F 0.6 250
Q502,Q504 Q503 Q505 Q506-Q511 Q513	5232255720 5232254820 5230782320	TRANSISTOR DIGI. DTC124ES TRANSISTOR DIGI. DTA124ES TRANSISTOR JC 501 Q TRANSISTOR DIGI. DTA124ES TRANSISTOR 2SA-934R 0.75 150
Q514 Q515 Q516 R501 R502	5230782320 5232255720 5232254820 5242123300 5240547720	TRANSISTOR JC 501 Q TRANSISTOR DIGI. DTC124ES TRANSISTOR DIGI. DTA124ES R.,ARRAY RYLS-8J223 CARBON ERD-A3TJ I.OKOHM
R504 U501 U502 U503	∆ 5241274510     5220824200     5220444900     ∆ 5220430300	R., INCOMBUSTIBLE IW 470HM J UCOM., UPD75004CW-074 IC., BA6219 IC., L78MR05

TRANS PCB ASSY

REF.NO.	PARTS NO.	DESCRIPTION
	*5200317530	TRANS PCB ASSY [US,C] TRANS PCB ASSY [GE] TRANS PCB ASSY [E] TRANS PCB ASSY [UK]
C812	*5210317500 \$\Delta\$ 5327009200 \$\Delta\$ 5350015600 \$\Delta\$ 5350010700 \$\Delta\$ 5350010800 \$\Delta\$ 5350011700 \$\Delta\$ 5128047000 \$\Delta\$ 5350008300 \$\Delta\$ 5267704000	TRANS PCB LAPPING, TERMINAL 2P [E,UK,A] CORD, AC [J] CORD, AC UL SPT-2 [US,C] CORD, AC UL SPT-1 [GE] CORD, AC CEE CLASS-2 [E] CORD, AC [UK] CORD, AC SAA 2-LEAD [A] SPARK, KILLER 0.0047UF250V
·\$801 \$802		SW., PUSH SDDLD 1-1 VOLTAGE CONVERSION 1-4 FS908F [GE]
ΤI	△ 5320060000	POWER TRANS

<sup>[</sup>J]:JAPAN [US]:U.S.A. [C]:CANADA [GE]:GENERAL EXPORT [E]:EUROPE [UK]:U.K. [A]:AUSTRALIA